Problem Statement-1

```
package com.test;
import org.testng.annotations.*;
public class usingTestng {

	@Test
	public void Test1() {
		System.out.println("Test1 Executed");
	}
	@Test
	public void Test2() {
		System.out.println("Test2 Executed");
	}

	@BeforeTest
	public void beforeTest() {
		System.out.println("BeforeTest Executed");
	}
	@AfterTest
	public void AfterTest() {
		System.out.println("AfterTest Executed");
	}

	@BeforeMethod
	public void beforeMethod() {
		System.out.println("BeforeMethod Executed");
	}
	@AfterMethod
	public void afterMethod() {
		System.out.println("AfterMethod Executed");
	}

	@BeforeClass
	public void beforeClass() {
		System.out.println("BeforeClass Executed");
	}
	@AfterClass
	public void afterClass() {
		System.out.println("AfterClass Executed");
	}

}
```

Problem Statement-2

```
package com.parallel;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.testng.annotations.Test;
public class ParallelTests {
WebDriver driver;
```

```
@Test(groups="Chrome")
public void LaunchChrome() {
System.setProperty("webdriver.chrome.driver",
"./Resources/chromedriver.exe");
driver = new ChromeDriver();
driver.get("https://www.facebook.com");
try {
Thread.sleep(2000);
} catch (Exception e) {
e.printStackTrace();
}
}
@Test(groups="Chrome", dependsOnMethods="LaunchChrome")
public void TryFacebook1() {
System.out.println(Thread.currentThread().getId());
driver.findElement(By.id("email")).sendKeys("ravi10thstudent@gmail.com");
driver.findElement(By.id("pass")).sendKeys("12345");
driver.findElement(By.id("loginbutton")).click();
}
@Test(groups="Firefox")
public void LaunchFirefox() {
System.setProperty("webdriver.gecko.driver", "./Resources/geckodriver.exe");
driver = new FirefoxDriver();
driver.get("https://www.facebook.com");
try {
Thread.sleep(4000);
} catch (Exception e) {
e.printStackTrace();
}
}
@Test(groups="Firefox", dependsOnMethods="LaunchFirefox")
public void TryFacebook2() {
System.out.println(Thread.currentThread().getId());
driver.findElement(By.id("email")).sendKeys("ravi10thstudent@gmail.com");
driver.findElement(By.id("pass")).sendKeys("ravi28394");
driver.findElement(By.id("loginbutton")).click();
System.out.println(Thread.currentThread().getId());
}
}
```

Problem Statement-3

```
package com.asserts;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.Assert;
import org.testng.annotations.Test;
import org.testng.asserts.SoftAssert;
public class Assertions {
SoftAssert soft = new SoftAssert();
WebDriver driver;
```

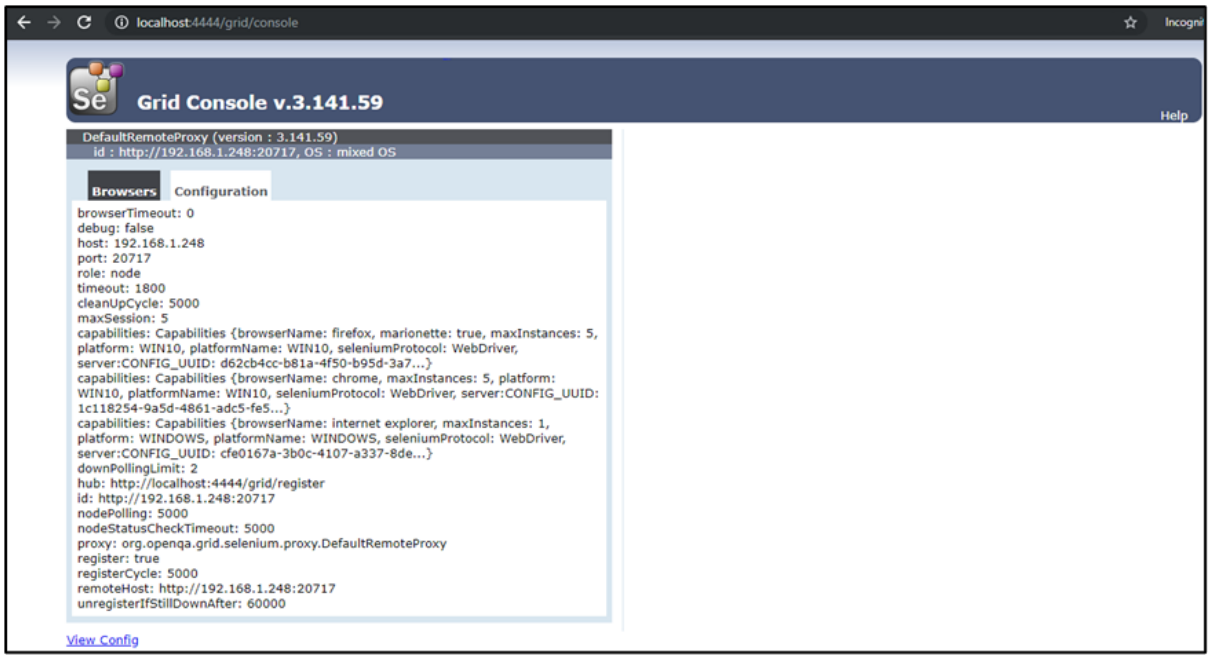
```
@Test
public void Launch() {
System.setProperty("webdriver.chrome.driver",
"./Resources/chromedriver.exe");
driver = new ChromeDriver();
try {
Thread.sleep(3000);
} catch (Exception e) {
e.printStackTrace();
}
}
@Test(dependsOnMethods = { "Launch" })
public void Facebook() {
driver.get("https://www.facebook.com");
soft.assertEquals("FB Title", driver.getTitle());
try {
Thread.sleep(2000);
} catch (Exception e) {
e.printStackTrace();
}
}
@Test(dependsOnMethods = { "Facebook" })
public void Login() {
driver.findElement(By.id("email")).sendKeys("ravi10thstudent@gmail.com");
driver.findElement(By.id("pass")).sendKeys("12345");
driver.findElement(By.id("loginbutton")).click();
soft.assertAll();
try {
Thread.sleep(3000);
} catch (Exception e) {
e.printStackTrace();
}
}
}
```

Problem Statement-4

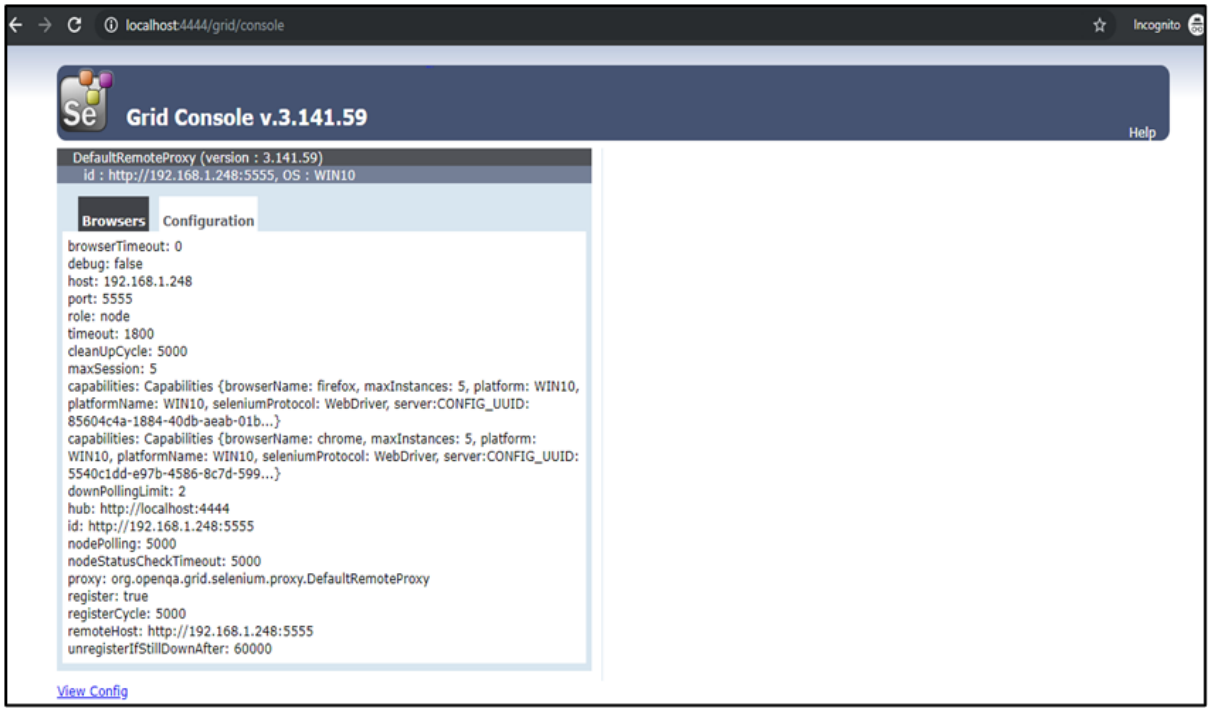
```
package com.example;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.Test;
import org.testng.asserts.SoftAssert;
public class NewTest {
private WebDriver driver;
SoftAssert soft=new SoftAssert();
```

```
@Test
public void testEasy() {
System.setProperty("webdriver.chrome.driver",
"./Resources/chromedriver.exe");
driver=new ChromeDriver();
driver.get("https://www.facebook.com");
String title = driver.getTitle();
soft.assertEquals("FB Login",title);
}
@BeforeTest
public void beforeTest() {
driver = new FirefoxDriver();
}
@AfterTest
public void afterTest() {
driver.quit();
}
}
```

Problem Statement-5



Problem Statement-6



Problem Statement-7

```java
import java.net.URL;

import org.openqa.selenium.Platform;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.remote.DesiredCapabilities;
import org.openqa.selenium.remote.RemoteWebDriver;

public class GridTest {

  public static void main(String[] args) throws MalformedURLException {
    DesiredCapabilities cap = new DesiredCapabilities();
    cap.setBrowserName("chrome");
    cap.setPlatform(Platform.WIN10);


    URL url = new URL("http://192.168.1.248:4444/wd/hub");
    WebDriver driver = new RemoteWebDriver(url, cap);

    driver.get("https://www.google.com");
    System.out.println("Google Title: " + driver.getTitle());

    driver.close();
  }

}
```